Debunking Ibogaine Safety Myths

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DEBUNKING IBOGAINE SAFETY MYTHS

IbogaSafe
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INTRODUCTION

As registered nurses who have worked in Ibogaine treatment, we are aware of practices and beliefs regarding Ibogaine safety that can become dangerous, often times life threatening. We propose that provider training using minimum standards of care outlined in the Clinical Guidelines for Ibogaine-Assisted Detoxification, meticulous patient screening/preparation, and proper emergency response planning could greatly diminish the risk of death from Ibogaine use.

METHODS

- Literature review.
- Research while co-authoring Clinical Guidelines for Ibogaine-Assisted Detoxification.
- Previous nursing experience in diverse settings within the Ibogaine community.

MYTH 1 IBOGAINE IS SAFE FOR TREATING ALL DEPENDENCIES

REALITY

Detox and withdrawal from substances of abuse can be complex, especially in cases involving poly-substance abuse because the withdrawal process is very unpredictable.

Ibogaine will not reduce or prevent potentially fatal withdrawal-related seizure activity in those physically dependent upon alcohol and benzodiazepines, which makes those clients more dangerous to treat.

The use of Ibogaine during detox can increase the risk of lethal cardiac arrhythmias and sudden cardiac arrest due to Ibogaine induced QT interval prolongation. *QT interval = electrical depolarization and repolarization of the ventricles. A vulnerable refractory period when electrical stimulation can trigger lethal cardiac arrhythmias.*

DEATHS AND/OR HOSPITALIZATIONS ASSOCIATED WITH:

POLYSUBSTANCE ABUSE	ALCOHOL	COCAINE/CRACK AMPHETAMINES	METHADONE	BENZODIAZEPINES
17	10	11	8	8

Total numbers taken from data available for 34 fatality or hospitalization case studies reviewed in medical literature.

RECOMMENDATION **Medical supervision before, during, and after Ibogaine-assisted detoxification from these substances is highly recommended due to the unpredictable nature of the heart and its delicate relationship with the complex pharmacology of Ibogaine.** (1,2,3,4,5,6)

MYTH 2 AFTER THE PSYCHOTROPIC EFFECTS WEAR OFF, ONE IS SAFE FROM ADVERSE EVENTS

REALITY

There is a wide variety documented in length of time between ingestion of Ibogaine and time of death. (1.5-76 hours)

The mean time of death in one study was 12-24 hours after ingestion of a flood dose, which is generally after the psychotropic effects have worn off.

Several deaths have occurred significantly later than time of ingestion (40, 48, 53, 60, and 76 hours). (2)

CASE STUDY 1

- 25 year old male with a history of SVT and chronic heroin addiction self-administered 2.5 g of Ibogaine (6.25 mg/kg) over 3 hours under supervision of his mother.
- Developed respiratory difficulty progressing to cardiopulmonary arrest. Successfully resuscitated, but displayed signs of severe brain injury. Death 2 days post ingestion from multi-organ failure. (1)

CASE STUDY 2

- 48 year old female ingested 14 mg/kg of Ibogaine at a treatment center for opioid detoxification. History of fibromyalgia and gastric bypass surgery. Toxicology positive for 3 kinds of benzodiazepines (not disclosed to providers).
- Sudden cardiac death 2 days post ingestion due to acute coronary syndrome per autopsy. (2)

RECOMMENDATION **Because fatalities occurred up to 76 hours after ingestion, it is best practice to maintain close supervision and monitoring for at least 3 full days after time of ingestion.**

MYTH 3 THERE IS NO RISK IF YOU LOW DOSE/MICRODOSE

REALITY

Due to it's potential for cardiotoxicity, Ibogaine requires careful patient screening and selection at any dose to prevent adverse events.

Doses as low as 300 mg (4.5 mg/kg) have been documented to be fatal in at-risk users.

CASE STUDY 1

- 44 year old female ingested 300 mg of Ibogaine HCl (4.5 mg/kg) for psychospiritual purposes became unresponsive 4 hours later. Medical history of hypertension and an abnormal ECG documented 3 months prior to death.
- Autopsy showed 3 vessel coronary artery disease and heart damage from a prior heart attack. Cause of death = Acute heart failure secondary to ibogaine intoxication. (2)

CASE STUDY 2

- 35 year old female ingested 500 mg of Ibogaine HCl (8 mg/kg) for psychospiritual purposes, found dead in bed 1.5 hours later. Medical history of a congenital heart defect (CHD) requiring surgery during childhood.
- Autopsy showed CHD and moderate coronary artery disease. Cause of death = Acute heart failure secondary to Ibogaine intoxication. (2)

RECOMMENDATION **Meticulous medical screening should be required of everyone ingesting ANY amount of Ibogaine to assess for preexisting heart conditions, cardiac disease risk factors, genetically prolonged QT syndrome, and any liver/kidney disease.**

MYTH 4 BUYING IBOGAINE ONLINE AND SELF-ADMINISTERING WITH A SITTER IS SAFE

REALITY

With increasing public awareness about Ibogaine, specifically its use in addiction treatment, self administration is on the rise. *10 out of the 34 cases reviewed involved self-administration.*

Online retailers give inadequate instruction without proper screening of the client. *6 out of 34 cases reviewed involved Internet purchase.*

Online retailers have sold counterfeit and/or contaminated products, which have also led to fatalities.

CASE STUDY 1

- 40 year old man self administered 4g of Ibogaine and 2g of an uncharacterized "booster" purchased via Internet for attempted heroin detoxification.
- Found 8 hours later, unresponsive, covered in emesis, in asystole (most terminal heart rhythm).
- ROSC in route to hospital. QTc peaked at 588 ms. Life support withdrawn after diagnosis of anoxic brain death confirmed. (3)

CASE STUDY 2

- 30 year old woman with history of heroin addiction, anorexia, and receiving methadone treatment found dead after ingestion of a powder labeled "Top quality Tabernanthe Iboga, Gabon Africa" bought online.
- Powder analysis revealed that it was a macroscopically similar shrub Rauvolfia sp. of the more common/less expensive Apocynaceae family, which has cardiotoxic effects. (5)

RECOMMENDATION **Ordering ibogaine online for self-administration alone, and/or treatment with an untrained or inexperienced provider/sitter is a big risk. Due diligence is imperative when choosing a safe setting for Ibogaine treatment.**

CONCLUSION

DETAILED COMPREHENSIVE SCREENING IS REQUIRED TO DETERMINE A CLIENT'S ELIGIBILITY FOR IBOGAINE TREATMENT. Preventing fatalities and other adverse reactions going forward is only possible through the informed screening, assessment, and preparation of clients, and emergency response preparation as detailed in the Clinical Guidelines for Ibogaine-Assisted Detoxification. IbogaSafe's on-site training service aims to reduce the amount of adverse events by working with providers and clinics individually to minimize risks associated with Ibogaine treatment.

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2 Alper, K. R., Stajić, M., & Gill, J. R. (2012). Fatalities temporally associated with the ingestion of ibogaine. Journal of forensic sciences, 57(2), 398-412.

3 Meisner, J. A., Wilcox, S. R., & Richards, J. B. (2016). Ibogaine-associated cardiac arrest and death: case report and review of the literature. Therapeutic advances in psychopharmacology, 6(2), 95-98.

4 Hildyard, C., Macklin, P., Prendergast, B., & Bashir, Y. (2016). A case of QT prolongation and Torsades de Pointes caused by ibogaine toxicity. Journal of Emergency Medicine, 50(2), e83-e87.

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6 Henstra, M., Wong, L., Chahbouni, A., Swart, N., Allaart, C., & Sombogaard, F. (2017). Toxicokinetics of ibogaine and noribogaine in a patient with prolonged multiple cardiac arrhythmias after ingestion of internet purchased ibogaine. Clinical Toxicology, 1-3.

Introduction

- As registered nurses who have worked in Ibogaine treatment, we are aware of practices and beliefs regarding Ibogaine safety that can become dangerous, often times life threatening.
- We propose that provider training using minimum standards of care outlined in the Clinical Guidelines for Ibogaine-Assisted detoxification could greatly diminish the risk of death from Ibogaine use.

Aspects of Safe Ibogaine Treatment

- Meticulous patient screening/selection
- Patient preparation
  - Physical, psychological, and emotional readiness
- Emergency response planning
  - Cardiac monitoring
  - Medical staff with ACLS experience.
- Aftercare
  - Recovery
  - Integration

Methods

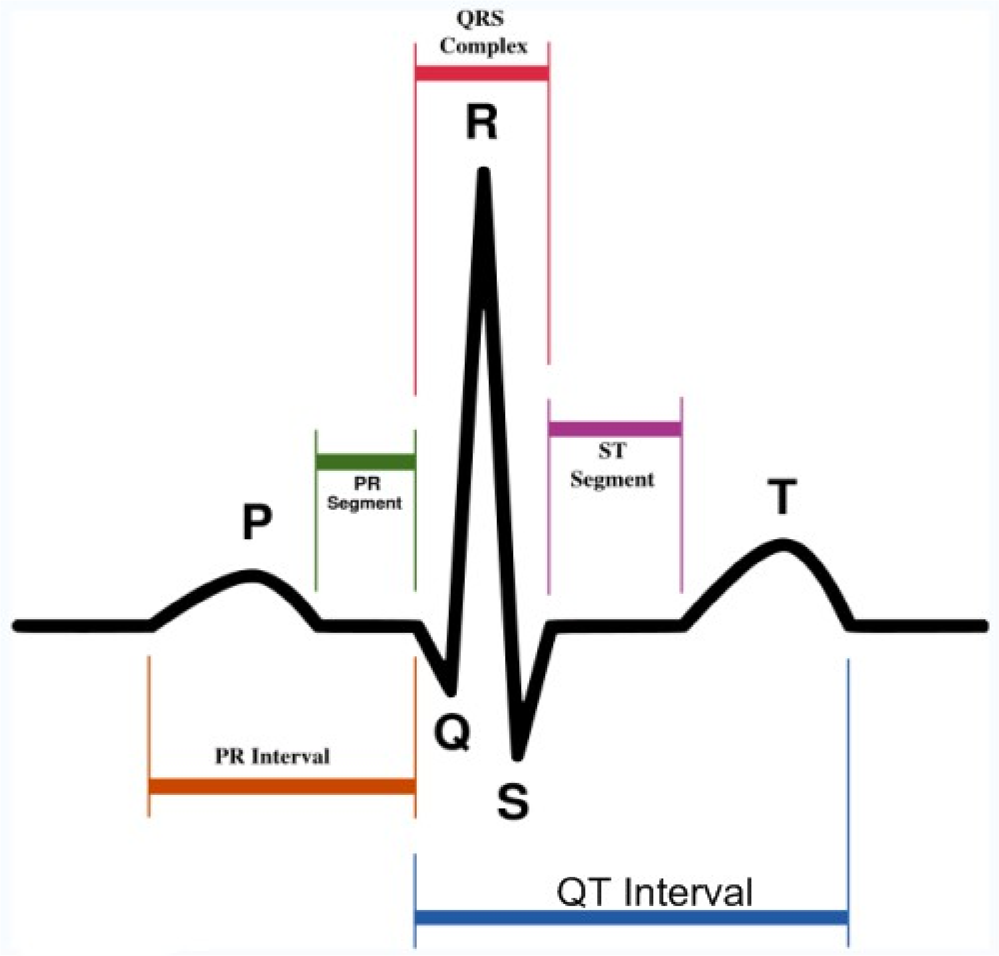
- Literature review - 34 case studies of adverse events/deaths pulled from medical literature.
- Research done while co-authoring Clinical Guidelines for Ibogaine-Assisted Detoxification.
- Previous nursing experience in diverse settings within the Ibogaine community.
- Resuscitation and critical/acute nursing experience.

Myth 1- Ibogaine is safe for treating all dependencies

- Detox and withdrawal from substances of abuse can be complex, especially in cases involving poly-substance abuse because the withdrawal process can be unpredictable.
- Ibogaine will not reduce or prevent potentially fatal withdrawal-related seizure activity in those physically dependent upon alcohol or benzodiazepines.
- The use of Ibogaine can increase the risk of lethal cardiac arrhythmias and sudden cardiac arrest due to Ibogaine induced QT interval prolongation.

QT interval

- Definition = Electrical depolarization and repolarization of the ventricles. A vulnerable refractory period when electrical stimulation can trigger lethal cardiac arrhythmias.



Deaths and/or Hospitalizations associated with:

- Poly-substance abuse = 17
- Benzodiazepines = 8
- Alcohol = 10
- Cocaine / Crack / Amphetamine = 11
- Methadone = 8

Case Study # 1

- 27 year old male found dead approximately 12 hours post-ingestion of a “teaspoon” of powdered iboga root the night before during a detoxification program. Estimated dose = 1.5-2 grams of powder.
- Poly-substance abuse history x 15 years. Alcohol, Crack/Cocaine, Amphetamine, Morphine, Heroin, Ecstacy, LSD, Psilocybin, Cannabis, and Methadone maintenence x 4 years, lately @ 30 mg/day (last dose 48 hours prior), Valium treatment x 10 years, lately @ 50 mg/day.
- Positive toxicology for Methadone and Benzodiazepines x 3 (diazepam, oxazepam, temazepam)*
- Autopsy report- no cardiopulmonary disease, aspiration pneumonia.
- Coroner’s report- cause of death = iboga poisoning.**

Recommendations

- Qualified medical supervision before, during and after Ibogaine-assisted detoxification from these substances is **highly recommended** due to the unpredictable nature of the heart and its delicate relationship with the complex pharmacology of Ibogaine.
- Qualified medical supervision =
  - A team that includes MD, RN, Paramedic level of education/training.
  - Proficient in ECG monitoring and interpretation.
  - Current ACLS level certification (ACLS = Advanced Cardiac Life Support).
  - Previous experience and comfort level with patients requiring resuscitation.
  - Knowledge of Ibogaine pharmacology, risks, and potential adverse events.

Myth 2- Buying Ibogaine online and self-administering with a sitter is safe

- With increasing public awareness about Ibogaine, specifically its use in addiction treatment, self administration is on the rise.
    - 10 out of 34 cases reviewed involved self-administration
- Online retailers give inadequate instruction without proper screening and assessment of the clients.
    - 6 out of 34 cases reviewed involved internet purchase
- Online retailers have sold counterfeit and/or contaminated products which have also led to fatalities.

Case Study # 1

- 40 year old male self administered 2 grams of Ibogaine and 4 grams of an uncharacterized “booster” purchased via internet for an attempted heroin detoxification. Negative toxicology.
- Found 8 hours later, unresponsive, covered in emesis, in asystole (flatline) which is the most terminal heart rhythm.
- ROSC in route to hospital. QTc peaked at 588 msec.
- Life support withdrawn after diagnosis of anoxic brain death confirmed.

Case Study # 2

- 39 year old male self administered 7 grams of Ibogaine purchased via internet for attempted heroin detoxification at home.
- No other significant medical history or medications. Negative toxicology.
- 3 seizures 5 hours after ingestion, hx of similar seizures 4 months prior during first ibogaine use.
- 8 episodes of pause-dependent Torsades de Pointes (TdP) requiring transvenous pacing in ICU.
- QT interval on admission = 640 msec, peaking at 730 msec on day 2, and returning to normal QT of 400 msec on discharge day 7.

Case Study # 3

- 30 year old female with a history of heroin addiction, anorexia, and receiving methadone treatment is found dead after ingestion of a powder labeled “Top quality Tabernanthe Iboga, Gabon, Africa” bought online for self administration.
- Poly-substance abuse history. Positive toxicology for benzo & cannabis. Positive for 11 different drugs of abuse by hair analysis.
- Toxicology analysis revealed that it was a macroscopically similar shrub called Rauvolfia sp. of the Apocynaceae family. Rauvolfia sp. is a more common/less expensive shrub that has cardiotoxic effects.
    - Observed toxic effects include hypersalivation, gastric hypersecretion, nausea, vomiting, diarrhea, skin flushes, nasal congestion, sedation or coma, hypotension and bradycardia.

Recommendations

- Ordering Ibogaine online for self administration alone, and/or treatment with an untrained or inexperienced provider or sitter is a BIG risk.
- Due diligence is most imperative when choosing a safe setting for Ibogaine treatment.
  - Exhaustively research potential providers. Get references.
  - Research medicine source.
  - Ask lots of questions.
  - Buyer beware.

Myth 3- There is no risk if you low dose/microdose

- Due to its potential for cardiotoxicity (all QT drugs), Ibogaine requires careful patient screening and selection at **any dose** to prevent adverse events.
- Prospective patients should be fully screened and prepared, regardless of planned dosing protocols.
- Doses as low as 300 mg (4.5 mg/kg) have been documented to be fatal in at risk users.

Case Study # 1

- 44 year old female ingested 300 mg of Ibogaine HCl (4.5 mg/kg) for psychospiritual purposes and became unresponsive 4 hours later.
- Past medical history of hypertension and an abnormal ECG documented 3 months prior to death.
- Autopsy showed 3 vessel coronary artery disease and heart damage from a prior heart attack.
- Cause of death = Acute heart failure secondary to ibogaine intoxication.

Case Study # 2

- 35 year old female ingested 500 mg of Ibogaine HCl (8 mg/kg) for psychospiritual purposes and was found dead in bed 1.5 hours later.
- Past medical history of a congenital heart defect (CHD) requiring surgery during childhood.
- Autopsy showed congenital heart defect and moderate coronary artery disease.
- Cause of death = acute heart failure secondary to ibogaine intoxication.

Recommendations

- Meticulous medical screening should be required of everyone ingesting **any amount** of Ibogaine to assess for exclusion criteria:
  - Pre-existing heart conditions
  - Cardiac disease risk factors
  - Genetically prolonged QT syndrome
  - Liver disease
  - Kidney disease
  - Seizure disorder/risk
  - Psychiatric disorders
  - And many more considerations...

Myth 4- After the psychotropic effects wear off, one is safe from adverse events

- There is a wide variety documented in length of time between ingestion of Ibogaine and time of death.
    - Range = 1.5-76 hours post-ingestion
- The mean time of death in one study was 12-24 hours after ingestion of a flood dose, which is generally after the psychotropic effects have worn off.
- Several deaths have occurred significantly later than time of ingestion.
    - Documented at 40, 48, 53, 60, and 76 hours post-ingestion

Case Study # 1

- 25 year old male self-administered 2.5 grams of Ibogaine HCl (6.25 mg/kg) over 3 hours under supervision of his mother.
- Past medical history of chronic heroin addiction and Supraventricular Tachycardia (SVT).
- Developed respiratory difficulty progressing to cardiopulmonary arrest, acute heart failure. Successfully resuscitated, but displayed signs of severe brain injury.
- Death 2 days post-ingestion of multiple organ failure.

Case Study # 2

- 48 year old female ingested 14 mg/kg of Ibogaine at a treatment center for opioid detoxification.
- Past medical history of poly-substance abuse (opiates + benzos), fibromyalgia, and gastric bypass surgery 8 months prior.
- Toxicology positive for 3 kinds of benzodiazepines (not disclosed to providers).
- Sudden cardiac death 2 days post-ingestion due to acute coronary syndrome per autopsy.

Recommendations

- Because deaths have occurred up to 76 hours post-ingestion, it is best practice to maintain close supervision and monitoring for a minimum of 3 full days after time of ingestion.
    - Vital signs
    - Level of consciousness
    - Mental state - calm environment
    - Rehydration
    - Recovery

Other notable correlations / Number of case studies associated with:

- Positive toxicology = 12
- Pre-existing cardiopulmonary disease = 10
- No cardiopulmonary disease/history = 12 *
- Sudden Cardiac Death/Acute heart failure/Arrhythmias = 21
- Liver disease = 5
- Psychospiritual = 3 (would be 4 if one covert detox attempt at a center for psychospiritual use were included)
- Self-administration = 10
- Internet purchase = 6

Conclusion

- Detailed comprehensive screening is required to determine a client’s eligibility for Ibogaine treatment.
- Preventing fatalities and other adverse reactions going forward is only possible through informed screening, assessment, and preparation of clients, and emergency response preparation as outlined in the Clinical Guidelines for Ibogaine-assisted Detoxification.
- IbogaSafe’s on-site training service aims to reduce the amount of adverse events by working with providers and clinics individually to minimize risks associated with Ibogaine treatment.

Thank you!

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